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PERRY HOFFMAN AND ASSOCIATES, P.C. P.O. BOX 1649 DEERFIELD, IL 60015			EXAMINER ALAM, SHAHID AL	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/998,613  
Filing Date: November 30, 2001  
Appellant(s): DAVIES ET AL.

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James A. Sprowl  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed September 7, 2007 appealing from the Office action mailed February 24, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

**NEW GROUND(S) OF REJECTION**

Claims 15, 17 – 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,119,149

NOTANI

9-2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**NEW GROUND(S) OF REJECTION**

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15, 17 – 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application with useful, concrete and tangible result.

Claim 15 recites a virtual private supply chain.

In the above limitation, there is no physical transformation being claimed, a practical application would be established by a useful, concrete and tangible result.

For it to be a tangible result, it must be more than a thought or a computation and must have a real world value rather than being an abstract idea. The invention as recited in the claim for indexing plurality of pages and providing a list of root pages of sites. A virtual private supply chain does not belong to any of the statutory classes.

The computer readable medium as recited in the claim 31 is not limited to tangible embodiments. In view of Applicant's disclosure, specification page 18, lines 1 – 25, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., removable storage and hard disk drive) and intangible embodiments (e.g., a carrier-wave signal). These particular sections in the disclosure refer to "communication media" and/or "transmission media".

Claim 31 is not patent eligible because claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

The claim is therefore drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefor not a composition of matter.

As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15, 17 – 34 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,119,149 issued to Ranjit Notani (hereinafter "Notani").

With respect to claim 15, Notani teaches a virtual private supply chain (Notani: Abstract; col. 2, lines. 1-7), comprising:

a data acceptor operable to receive one or more supply chain data items from one or more supply chain members (Notani: col. 14, lines. 40-41 - note that the accessor of Notani is analogous to the acceptor of applicant);

a supply chain data store operable to store one or more supply chain data items received from one or more supply chain members (Notani: col. 5, lines. 32-47 – note that a persistent hierarchy of slots reads on a data store);

a data accessor operable to selectively present one or more supply chain data items stored in the supply chain data store to one or more viewing supply chain members (Notani: col. 4, lines. 17-26; Fig. 8, items 60 and 58 - note the web server implies viewing of data over an Internet browser); and

a component that establishing one or more relationships within the supply chain data store between a first supply chain data item originating from a first supply chain data member and one or more second supply chain data items originating from one or more second supply chain members (Notani: col. 15, lines. 55-58; col. 15, in. 66 to col. 16, line. 10; col. 14, lines. 43-46; col. 14, lines. 56-62 – note that a hub and spoke architecture facilitates establishing relationships of data items).

As to claim 17, an ownership identifier is established within the supply chain data store for one or more supply chain data items (col. 9, lines. 53-54; col. 10, line. 53 to col. 11, line. 11 – note that verify that a partner is who it claims to be, plus ability to collect data grouped by partnership, reads on facilitating establishing an ownership identifier).

As to claim 18, the supply chain data store is further adapted to facilitate establishing one or more access rights to supply chain data items (col. 10, lines. 56-65 – note that setting “read, write, take, and subscribe permissibility’s” reads on establishing access rights).

As to claim 19, the data acceptor is further adapted to transform the received supply chain data to conform with one or more supply chain schema (col. 14, lines. 41-

42; col. 14, line. 63 to col. 15, line. 2; col. 15, lines. 31-43 - note the transformer conforming to the CDM schema).

As to claim 20, the data acceptor is further adapted to validate the transformed supply chain data (col. 12, lines. 5-17 - note that strong typing inherently reads on data validation since strong typing implies checking for a type mismatch error on incoming data, which in turn reads on data validation).

As to claim 21, the data acceptor is further adapted to load the validated supply chain data into the supply chain data store (col. 5, lines. 32-47; col. 14, lines. 40-48 - note that a persistent hierarchy of slots reads on data storage and note the accessor, transformer, and transfer objects).

As to claim 22, the data accessor implements row-level supply chain security (col. 10, line. 53 to col. 11, line. 11; col. 9, lines. 44-58 - Note that the ability to separate data rows specific to a collaboration, and further to set security attributes on a per element basis reads on row-level security).

As to claim 23, the row-level supply chain security employs at least one of secure socket layers (SSL), digital certificates and encryption (col. 3, lines. 30-52).

As to claim 24, the one or more supply chain members are configured in a hub and spoke configuration, with the supply chain members located at spokes and at least one of the data acceptor, the data accessor and the supply chain data store located at the hub (col. 3, line. 59 to col. 4, line. 5; Fig. 2).

As to claim 25, at least one supply chain member implements a connection stream (col. 7, lines. 10-19).



As to claim 26, the connection stream is adapted to facilitate making communications between the hub and the spoke implementing the connection appear as a stream (col. 7, lines. 10-19).

As to claim 27, the connection stream is further adapted to facilitate sending, receiving and/or validating BIOs (col. 7, lines. 10-19; col. 11, line. 61 to col. 12, line. 4 – note XML and Java (TM) Serial Streams support transfer of interface formats which reads on the “business interface objects” of applicant and further that “parameterized workflow” read on “business interface objects” of applicant).

As to claim 28, the connection stream is further adapted to facilitate selecting an encryption level to be applied to data communicated between the hub and the spoke implementing the connection stream (col. 10, Table 2).

As to claim 29, one or more supply chain data items may be persisted at one or more spokes (col. 3, line. 46 to col. 4, line. 5 – note that any enterprise, both hub and spoke, that participates in a global collaborations contains its own data).

As to claim 30, the persisted items are stored as BLOBS (Binary Large Objects) (col. 5, lines. 48-56 – note that an “arbitrary byte array” reads on a BLOB).

With respect to claim 31, Notani teaches a computer readable medium storing computer executable components of a virtual private supply chain comprising:

a data accepting component operable to receive one or more supply chain data items from one or more supply chain members (col. 14. lines. 40-41 - note that the accessor of Notani is analogous to the acceptor of applicant);

a supply chain data storing component operable to facilitate storing one or more supply chain data items received from one or more supply chain members (col. 5, lines. 32-38; col. 14, lines. 40-48 – note that a persistent hierarchy of slots reads on a data storage and note the accessor, transformer, and transfer objects); and

a data accessing component operable to selectively present one or more supply chain data items stored by the supply chain data storing component to one or more viewing supply chain members (col. 4, lines. 17-26; Fig. 8, items 60 and 58 - note the web server implies viewing of data over an Internet browser).

With respect to claim 32, Notani discloses: a method for providing a virtual private supply chain between two or more supply chain members, the method comprising:

centralizing supply chain data from a plurality of supply chain members (col. 5, lines. 32-47 - note that the global collaboration workspace reads on centralized data with respect to the collaboration data);

conforming the supply chain data to one or more common schema (col. 14, lines. 41-42; col. 14, line. 63 to col. 15, line. 2; col. 15, lines. 31-43 - note the transformer conforming to the CDM schema); and

selectively permitting access to conformed supply chain data based on row-level security applied to the conformed supply chain data (col. 10, line. 53 to col. 11, line. 11; col. 9, lines. 44-58 - Note that the ability to separate data rows specific to a collaboration, and further to set security attributes on a per element basis reads on row-level security).

With respect to claim 33, Notani discloses: a method for providing a virtual private supply chain between two or more supply chain members, the method comprising:

accepting one or more supply chain data items from one or more supply chain members (col. 14, lines. 40-41 - note that the accessor of Notani is analogous to the acceptor of applicant);

establishing one or more ownership identifiers for the supply chain data items (col. 9, lines. 53-54; col. 10, line. 53 to col. 11, line. 11 – note that verify that a partner is who it claims to be, plus ability to collect data grouped by partnership, reads on facilitating establishing an ownership identifier);

transforming the supply chain data items to conform with one or more supply chain schema (col. 14, lines. 41-42; col. 14, line. 63 to col. 15, line. 2; col. 15, lines. 31-43 - note the transformer conforming to the CDM schema);

validating the transformed supply chain data items (col. 12, lines. 5-17 - note that strong typing inherently reads on data validation since strong typing implies checking for a type mismatch error on incoming data, which in turn reads on data validation);

storing the validated supply chain data items in a supply chain data store (col. 5, lines. 32-47; col. 14, lines. 40-48 – note that a persistent hierarchy of slots reads on a data storage and note the accessor, transformer, and transfer objects);

establishing one or more relationships between supply chain data items received from two or more supply chain members (col. 4, lines. 27-40); and

selectively permitting access to one or more supply chain data items based on at least one of the ownership of the supply chain data item, the one or more relationships associated with the supply chain data items, and the one or more access permissions associated with the supply chain data items (col. 10, lines. 56-65 – note that setting “read, write, take, and subscribe permissibility” reads on establishing access rights).

As to claim 34, a computer readable medium storing computer executable instructions operable to perform the method of Claim 33 (col. 17, lines. 9 – 10).

With respect to claim 37, Notani discloses a method for providing a virtual private supply chain between two or more supply chain members, the method comprising:

means for collecting supply chain data from a plurality of supply chain members (col. 14, lines. 40-41 - note that the accessor of Notani '149 is analogous to the acceptor of applicant);

means for standardizing the collected supply chain data to one or more supply chain schema (col. 14, lines. 41-42; col. 14, line. 63 to col. 15, line. 2; col. 15, lines. 31-43 - note the transformer conforming to the CDM schema which is a standardizing schema); and

means for securely accessing the collected supply chain data (col. 3, lines. 30-52 – note SSL reads on secure access).

**(10) Response to Argument**

Appellant's arguments regarding the rejection of claims 15, 17 – 34 and 37:

Argument A: Notani is silent regarding establishing one or more relationships within the supply chain data store between a first supply chain data item originating from a first supply chain member and one or more second supply chain data items originating from one or more second supply chain members (Page 16, Brief).

Argument B: Notani fails to teach or suggest that an ownership identifier should be established with the supply chain data store for one or more supply chain data items (Page 18, Brief).

Argument C: There is simply no occurrence of the word "row" in this patent, and no mention of "row level" in the Notani patent (Page 20, Brief).

**Examiner's Response to Arguments:**

In response to argument A:

In response to appellant's argument, Notani discloses a process of distributed workflow activities over the nodes in the node group, and executing to provide multi-enterprise collaboration. Supply chain, enterprise and site planning applications and environments are widely used by manufacturing entities for decision support and to help manage operations. Decision support environments for supply chain, enterprise, and site planning have evolved from single-domain, monolithic environments to multi-domain, monolithic environments. The global collaboration workspace can be organized as a hierarchy of slots which can be in-memory or persistent. Slots also can

be queued or regular, and fine grained permissibility can be attached to each slot. The permissibility can be assigned by-user-by-operation. Nolani teaches relationships between supply chain data stores where Notani teaches the collaborative workspaces that are split into an internal collaborative workspace and an external collaborative workspace. Only data that needs to be truly shared with partners is in the external collaborative workspace. The rest is in the internal collaborative workspace. The external collaborative workspace is designed to sit either outside the corporate firewall or in an Extranet or DMZ. The collaboration framework design does not require the external collaborative workspace to make connections through the corporate firewall into the Intranet. Global collaborations can use both the external and internal collaborative workspaces. Local collaborations can use only the internal collaborative workspace and are hence completely invisible to partner enterprises. Even for global collaborations only the relevant portions use the external collaborative workspace. A hub enterprise is coupled to and communicates with an internal global collaboration workspace and an external global collaboration workspace. A spoke enterprise and a web enterprise connect through a web server to the external global collaboration workspace. Spoke enterprise, like hub enterprise, has an internal global collaboration workspace. The enterprises can be protected by associated firewalls, while the extranet formed by web server and external global collaboration workspace can be protected by a filtering router and communication via HTTP over SSL 3.0 (see abstract, column 2, lines 1 –9, column 5, lines 32 – 47, column 15, line 55 – column 16, line 10).

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification.

#### Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

In response to argument B:

In response to appellant's argument, Notani discloses ownership identifiers within the supply chain data store for one or more supply chain data items. Any multi-enterprise collaborative framework should address all of these different facets. The requirements for a collaborative security framework can include that: data exchanged between two partners should only be seen by the two partners; data exchanged between **two partners** (owner) should be tamper-proof; an enterprise should be able to verify that a partner is who it claims to be; the framework should not introduce new security holes into a partners' network; and the framework should be relatively easy to set up and administer. A third element in the collaboration framework security strategy is the ability to partition data across various collaborative workspaces. In particular, the collaborative workspaces are split into an internal collaborative workspace and an external collaborative workspace. Only data that needs to be truly shared with partners is in the external collaborative workspace. The rest is in the internal collaborative

workspace. The external collaborative workspace is designed to sit either outside the corporate firewall or in an Extranet or DMZ. The collaboration framework design does not require the external collaborative workspace to make connections through the corporate firewall into the Intranet. Note that this verify that a partner (owner) is who it claims to be, plus ability to collect data grouped by partnership (ownership), reads on facilitating establishing an ownership identifier (column 10, line 53 – column 11, line 11).

In response to argument C:

In response to appellant's argument, Notani discloses the global collaboration workspace that can support a hierarchical permissibility model with individual permissibility attached to different data elements in the hierarchy. In particular, it can support user-specific and spoke-specific read, write, take and subscribe permissibility. Hence, enterprises can finely tune who can read what data, who can write what data, who can take what data and who can subscribe to write-notifications on what data. Note that the ability to separate data rows specific to collaboration and further to set security attributes on a per element basis reads on row-level security.

Notani further teaches various levels of granularity at which access and transformation can take place including the relational (table), generic object (tree, graph, matrix etc.) and specific object (Bill of Material, Plan etc.) levels. Sometimes access may only be available at one level (say tables), but transformation may be more appropriate at another level (say generic object). For example, hierarchical



aggregation (a form of transformation) is often appropriate on a tree object. However, the data may only be accessible in a tabular form. In this case, for example, the data should be accessed at the tabular level, transformed into a tree, and then have the hierarchical aggregation applied to it. Access and transformation can have three levels. A first level can involve **table access (Note that a table consist of row and column)** and transforms. A second level can involve generic object (tree, graph, etc.) access and transforms, and a third level can involve specific object (build-of-materials, plan, etc.) access and transforms (column 15, lines 31 – 50).

As explained above, Notani's teachings of table access (Note that a table consist of row and column) clearly teaches applicants argument.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* dismissal of the appeal as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

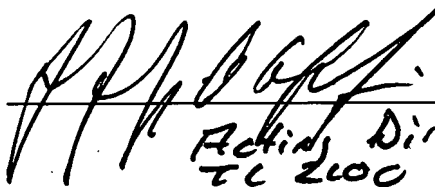
Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,



Shahid Al Alam  
Primary Examiner, AU 2162


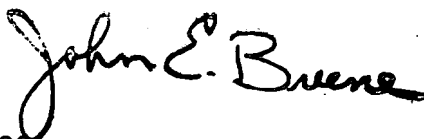
**A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:**

  
Acting Director  
TC 2100

Conferees:

John Breene, SPE 2162

Mohammad Ali, SPE 2169

  
CHARLES RONES  
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